

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1055277

Luminaire Tested: S122R3DR-S865D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055277
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S865D950-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

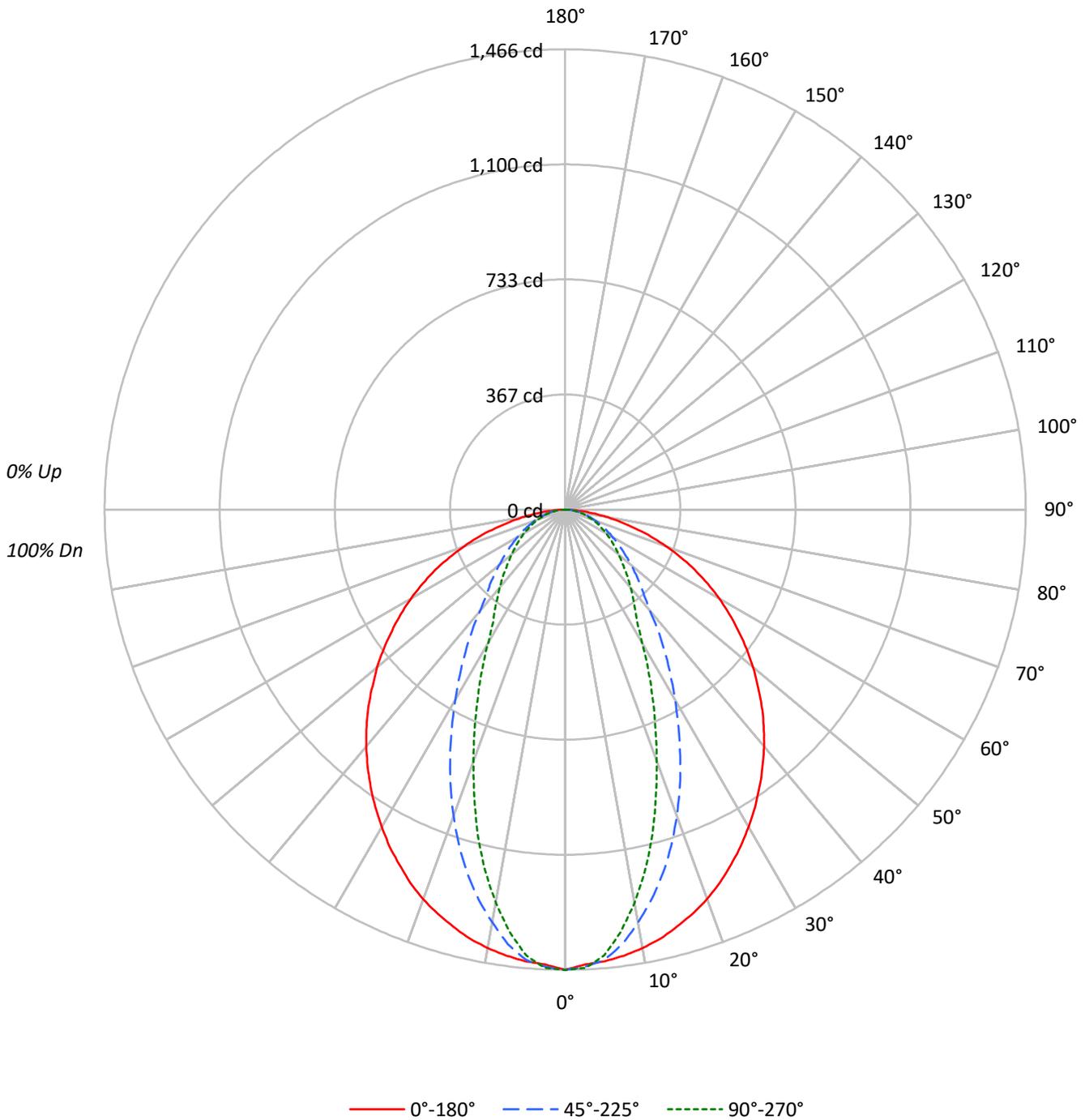
Lumens per Lamp: N/A
Luminaire Lumens: 2217.8 lumens
Efficiency: N/A
Efficacy: 63.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27778	27778	27778
5°	27466	27373	27116
10°	27287	25685	24457
15°	26979	23541	21040
20°	26622	20936	17178
25°	26089	18093	13711
30°	25532	15287	10702
35°	24951	12788	8988
40°	24346	10370	8006
45°	23715	9067	7162
50°	23017	8023	6540
55°	22230	7247	6074
60°	21462	6597	5669
65°	20447	6048	5330
70°	18945	5639	5024
75°	16785	5117	4758
80°	14315	4812	4419
85°	9869	4261	4000

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 23715 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.4	6.1
10°-20°	339.2	15.3
20°-30°	418.0	18.8
30°-40°	401.0	18.1
40°-50°	345.9	15.6
50°-60°	268.4	12.1
60°-70°	183.8	8.3
70°-80°	99.8	4.5
80°-90°	27.3	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	891.6	40.2
0°-40°	1292.6	58.3
0°-60°	1906.9	86.0
0°-90°	2217.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2217.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1466	1466	1466	1466	1466	
5°	1444	1465	1439	1421	1426	137
15°	1376	1334	1200	1102	1073	388
25°	1248	1114	866	706	656	575
35°	1079	856	553	412	389	675
45°	885	596	338	280	267	682
55°	673	358	219	190	184	602
65°	456	195	135	123	119	450
75°	229	90	70	66	65	246
85°	45	22	20	20	18	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1466.2	1466.2	1466.2	1466.2	1466.2
2.5°	1450.3	1474.8	1457.7	1457.7	1461.3
5°	1444.2	1465.0	1439.3	1420.9	1425.8
7.5°	1433.1	1447.8	1396.4	1357.1	1355.9
10°	1418.4	1419.7	1335.1	1283.6	1271.3
12.5°	1400.0	1380.4	1272.5	1195.3	1176.9
15°	1375.5	1333.8	1200.2	1102.1	1072.7
17.5°	1349.8	1286.0	1123.0	1000.4	959.9
20°	1320.4	1228.4	1038.4	898.6	852.0
22.5°	1287.2	1173.2	953.8	800.5	751.5
25°	1248.0	1114.4	865.5	706.1	655.9
27.5°	1210.0	1054.3	780.9	622.8	571.3
30°	1167.1	989.3	698.8	543.1	489.2
32.5°	1124.2	923.1	622.8	467.1	426.6
35°	1078.8	855.7	552.9	411.9	388.6
37.5°	1032.3	789.5	486.7	375.1	354.3
40°	984.4	723.3	419.3	339.6	323.7
42.5°	935.4	658.3	372.7	310.2	295.5
45°	885.1	595.8	338.4	279.5	267.3
47.5°	831.2	533.3	305.3	253.8	242.7
50°	780.9	473.2	272.2	230.5	221.9
52.5°	727.0	414.4	245.2	209.6	202.3
55°	673.0	358.0	219.4	190.0	183.9
57.5°	620.3	304.0	194.9	171.6	166.7
60°	566.4	261.1	174.1	154.5	149.6
62.5°	511.2	226.8	154.5	138.5	133.6
65°	456.1	194.9	134.9	122.6	118.9
67.5°	398.4	164.3	117.7	107.9	105.4
70°	342.0	137.3	101.8	93.2	90.7
72.5°	286.9	111.6	85.8	79.7	77.2
75°	229.3	89.5	69.9	66.2	65.0
77.5°	179.0	69.9	56.4	53.9	52.7
80°	131.2	51.5	44.1	41.7	40.5
82.5°	87.0	35.6	31.9	30.6	29.4
85°	45.4	22.1	19.6	19.6	18.4
87.5°	14.7	9.8	9.8	9.8	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)